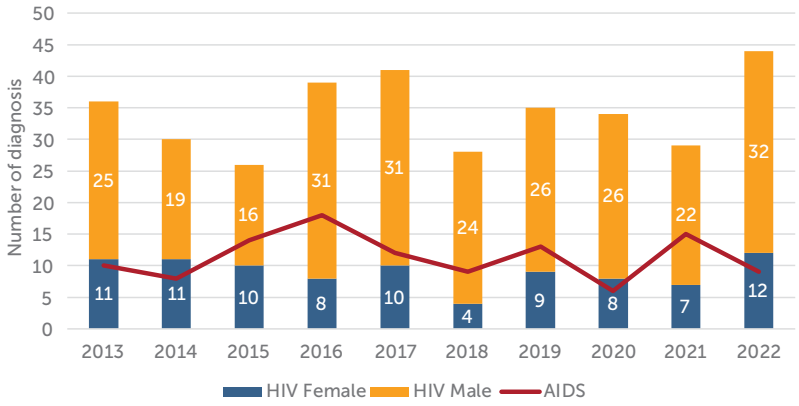
2023 HIV/AIDS Surveillance Report

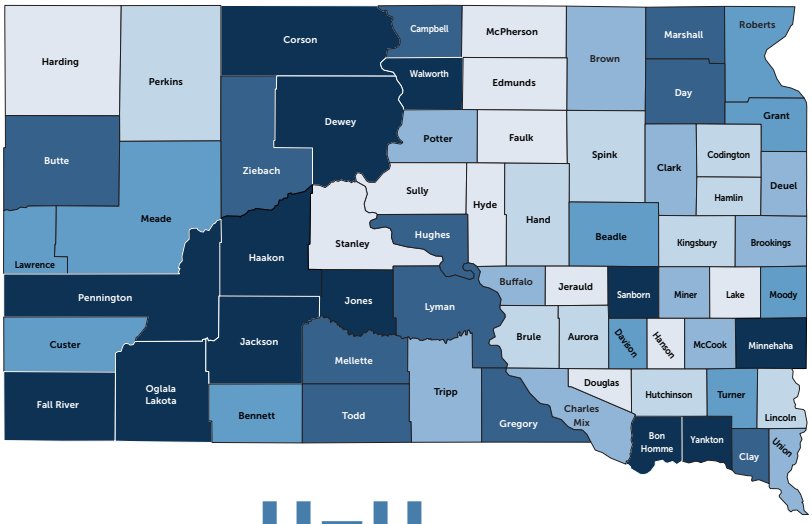
Persons newly diagnosed with HIV or AIDS in South Dakota, cases by gender, 2013-2022

**To promote anonymity, gender is shown in this report as that which was assigned at birth.*

***Information may vary year to year as new data regarding previously out of state diagnoses becomes available to the SD DOH.*



Persons diagnosed with HIV in South Dakota, Incidence rate, by county of residence at diagnosis, 1985-2022



Rate per 10,000

0.0 - 1.2	5.7 - 6.9
1.3 - 4.0	7.0 - 10.6
4.1 - 5.6	10.7 - 36.2

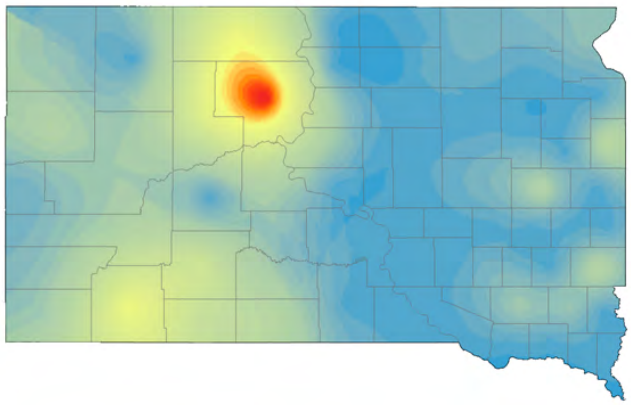
Rates have been calculated based on number of diagnoses, per county, since data collection began in 1985 in South Dakota. To portray an accurate disease rate per county, rates were calculated per 10,000, based on 2021 SD county population estimates from the United States Bureau of Census.[1]

U=U

Undetectable = Untransmittable

Studies have shown that HIV-positive individuals who achieve and maintain an undetectable or suppressed viral load are unable to transmit HIV to an uninfected person.[6] By maintaining viral suppression, HIV-positive individuals can ensure that they will not pass HIV on to their partners.[6]

This map displays the viral suppression of the HIV-positive individuals currently residing in South Dakota. Viral suppression is defined as a viral load of fewer than 200 copies/mL.[2]

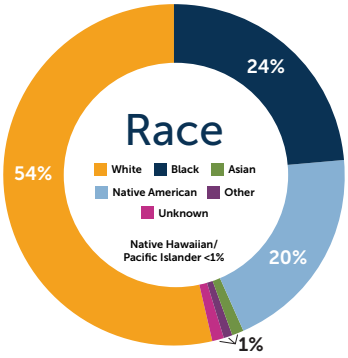


Areas in red indicate where a higher proportion of non-virally suppressed individuals reside, whereas the areas in blue indicate where a higher proportion of virally suppressed individuals reside.

Characteristics of persons living with HIV in South Dakota

According to data available in March, 2023

As of December 31, 2022, there were 725 people with HIV and/or AIDS known to be living in South Dakota.



Prevalence Rate by Race and Ethnicity

*Based on 2021 SD population estimates from the US Census Bureau [1]

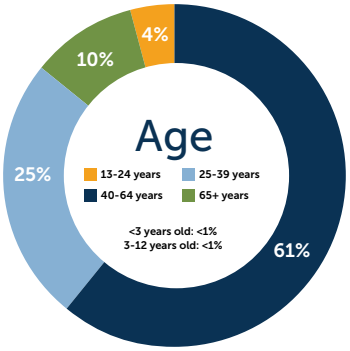
BLACK/AFRICAN AMERICAN: **102.2** per 10,000

NATIVE AMERICAN/AMERICAN INDIAN: **20.7** per 10,000

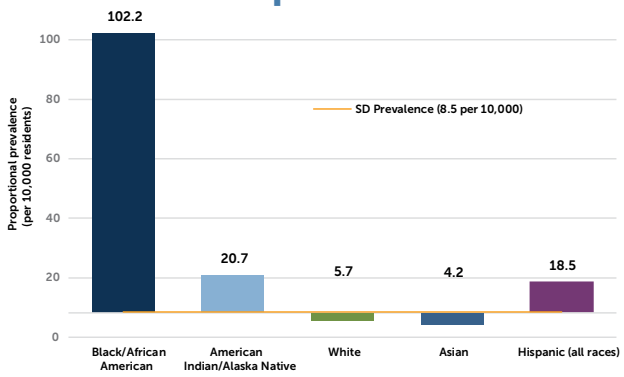
WHITE: **5.7** per 10,000

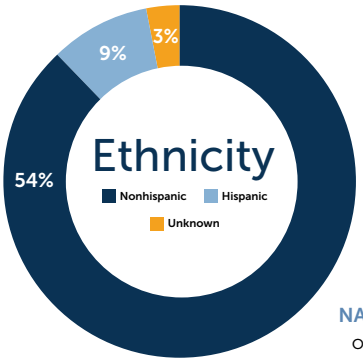
ASIAN: **4.2** per 10,000

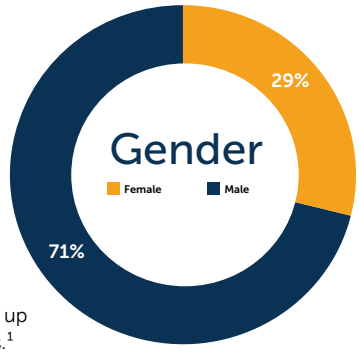
HISPANIC: **18.5** per 10,000



Racial & Ethnic Disparities in South Dakota







BLACK/AFRICAN AMERICAN: Black/African Americans make up only **2.0%** of South Dakota's population, but account for **24%** of SD HIV/AIDS cases.[1]

NATIVE AMERICAN/AMERICAN INDIAN: Native Americans/American Indians make up only **9%** of South Dakota's population, but account for **20%** of SD HIV/AIDS cases.[1]

HISPANIC ETHNICITY: Individuals of Hispanic ethnicity make up only **4.5%** of South Dakota's population, but account for **9%** of SD HIV/AIDS cases.[1]

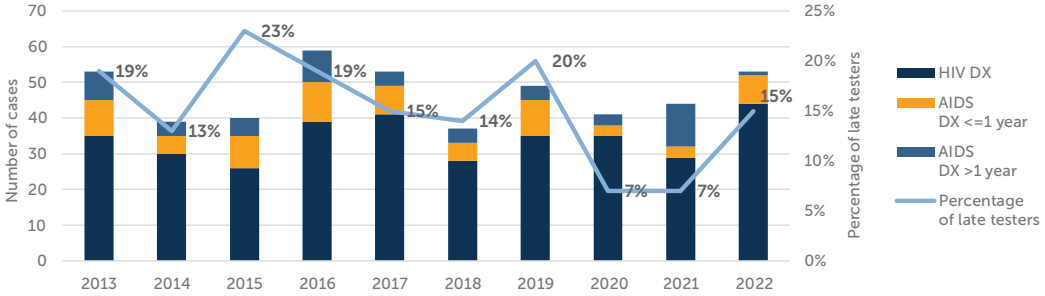
HIV versus AIDS

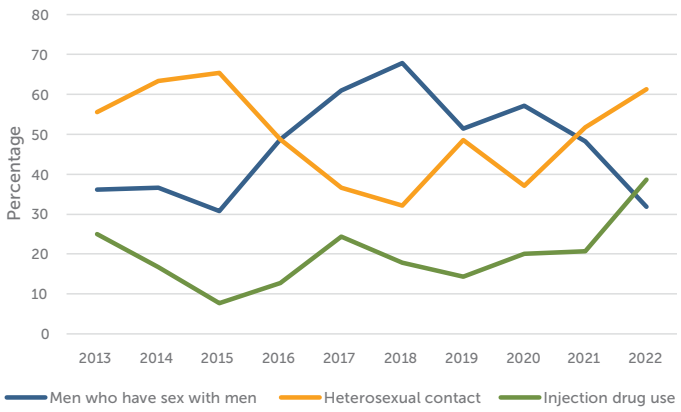
A person reaches AIDS status when their immune system becomes severely compromised.

In the absence of treatment, AIDS usually develops 8 to 10 years after initial HIV Infection.[3] Of persons living with HIV in South Dakota, 36.7% have also progressed to AIDS.

"Late Testers"

Late testers are individuals who are diagnosed with AIDS within 12 months of their initial HIV diagnosis. However, with early HIV diagnosis and treatment, this can be delayed by years.[3]



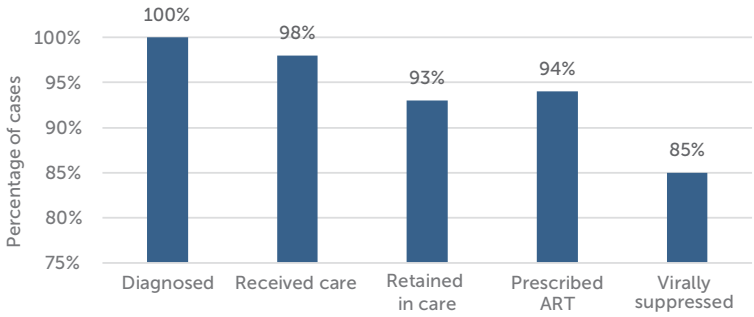


Risk factors reported for persons newly diagnosed with HIV in South Dakota, 2013-2022

Intravenous drug use continues to be a common means of HIV transmission in the United States. Most recently published by the Centers for Disease Control and Prevention (CDC), by the end of 2018, people who inject drugs accounted for **10%** of the total HIV diagnoses in the United States.[4] In comparison, **13%** of South Dakotans diagnosed with HIV in 2018 reported injection drug use.

HIV Care Continuum

The HIV Care Continuum illustrates the number of clients in South Dakota who are:



Diagnosed: Clients who have a positive confirmatory HIV test. The CDC estimates that approximately 13% of the population is unaware of their HIV status.[5]

Received Care: Clients who have been referred to a care provider and have received at least one visit.

Retained in Care: Clients who are seeing their provider on a routine basis.

Prescribed ART: Clients who have been prescribed anti-retroviral therapy.

Virally Suppressed: Clients who have an undetectable viral load. Scientific advances have shown that antiretroviral therapy (ART) preserves the health of people living with HIV. People with HIV who take HIV medicine as prescribed and get and keep an undetectable viral load (or stay virally suppressed) have effectively no risk of transmitting HIV to their HIV-negative sexual partners. Viral suppression is defined as HIV RNA less than 200 copies/mL.[6]

HIV Co-infection with Chlamydia, Gonorrhea, Hepatitis C, Syphilis & Tuberculosis (TB) by Year, Sex, and Age, 2017-2022

		Year						Sex		Age Groups			
	Total*	2017	2018	2019	2020	2021	2022*	Female	Male	13-24 Years	25-44 Years	45-65 Years	66+ Years
Chlamydia	45	0	4	7	8	13	13	17	28	4	28	13	0
Gonorrhea	62	1	6	7	13	20	15	29	33	2	32	28	0
Hepatitis C	20	1	1	3	3	3	9	5	15	1	6	12	1
Syphilis	68	6	5	6	7	16	28	6	62	3	31	33	1
TB	2	1	0	0	0	1	0	0	2	0	0	2	0
Total	197	9	16	23	31	53	65	57	140	10	97	88	2

*Provisional 2022 data as of May 1, 2023.

Syphilis Resurgence

Syphilis resurgence is happening nationwide, including in South Dakota. The SD Department of Health is asking that all clinicians across South Dakota strongly consider screening individuals at high-risk for STIs, all pregnant women at time of initial pregnancy diagnosis, early in the third trimester and at delivery (including live births, stillbirths, or terminations) and all neonates. High-risk includes men who have sex with men (MSM), persons living with HIV, those with multiple or anonymous sex partners, those having unprotected sex, anyone with a recent bacterial STI, those who use recreational substances, and those who participate in any type of transactional sex. Clinicians should also maintain a high index of suspicion for syphilis in at-risk patients presenting with anogenital ulcerations or other new onset of dermatologic findings. All patients with reactive syphilis serologic results should undergo a thorough physical examination (including oral, vaginal, and anal surfaces) to rule out the presence of lesions. **Infected patients should be advised to avoid all sexual contact until after:**

2022 STD Statistics*

Total Syphilis (all stages): 1,950 cases

Total Chlamydia: 3,191 cases

Total Gonorrhea: 3,073 cases

*Provisional 2022 data as of May 1, 2023.

1. Seven days have passed after the completion of treatment,
2. Resolution of all symptoms, and
3. Ongoing sexual partners seek medical evaluation for possible infection and receive post exposure prophylaxis.

All sex partners and needle sharing partners of infected individuals should be screened. CDC recommends presumptive treatment (even in the absence of clinical or serologic findings) of any persons exposed to syphilis within the past 90 days (i.e., the incubation period) to a case of primary, secondary, or early latent syphilis – and possible latent syphilis with unknown duration.

Be Advised: Treatment guidelines for gonorrhea infections have changed. Please review the full STI Treatment Guidelines at https://www.cdc.gov/std/treatment-guidelines/toc.htm.

For questions, concerns, or information regarding STIs, contact the STI Program Manager at 605-773-4794 or via email at Kacee.Redden@state.sd.us.

PrEP: Pre-Exposure Prophylaxis

HIV infections can be prevented, and there is a prevention option called pre-exposure prophylaxis or PrEP. PrEP involves taking a daily pill or an injection every other month to avoid acquiring HIV. There are three medications approved by the FDA for PrEP, Truvada®, Descovy®, and Apretude®. Truvada® is for all people at risk through sex or injection drug use, while Descovy® is for people at risk through sex, except for people assigned female at birth who are at risk of getting HIV from vaginal sex, and Apretude® is for people at risk through sex who weigh at least 77 pounds.[8] This regimen can reduce the risk of getting HIV from sex by up to 99 percent when taken daily. Among people who inject drugs, PrEP can reduce the risk of getting HIV by at least 74% when taken daily.[8] PrEP does NOT replace other risk reduction options, such as reducing the number of risk exposures, using condoms consistently, and ensuring that partners with HIV are on antiretroviral treatment. However, this medication will assist many patients for whom traditional risk reduction options may be insufficient to prevent HIV infection.

The National Clinicians Consultation Center provides information and assistance to clinicians wishing to prescribe PrEP by calling 1-855-448-7737 (1-855-HIV-PREP), Monday through Friday, 10 a.m. to 7 p.m. CT. Any licensed clinician with prescribing privileges can prescribe PrEP.

Are you a PrEP friendly provider? If so, add your information to https://preplocator.org, to let community members know. If you would like the South Dakota Department of Health to know you are PrEP friendly, please contact us. If you have a patient who is interested in PrEP, but doesn't know where to start, our staff can assist.

Ryan White Program

The Ryan White Part B Program is a federal program and local resource for any individual who is a resident of South Dakota, is diagnosed as HIV positive, and has an income at or less than 300% of the federal poverty level. The program assists individuals with the cost of core medical services such as outpatient and ambulatory health services, AIDS Drug Assistance Program treatments, early intervention services, health insurance premium, and cost-sharing assistance. In 2022, 415 HIV-positive South Dakotans were provided with allowable services through the Part B program. For information on how to apply, visit https://doh.sd.gov/topics/diseases-conditions/communicable-infectious-diseases/reportable-communicable-diseases/hivaids/ryan-white-part-b-program/. For more information on program specifics, contact the Ryan White Program Coordinator at 605-367-4795 or via email at Virginia.Albertson@state.sd.us.

Confidential Disease Reporting

The South Dakota Department of Health is authorized by SDCL 34-22-12 and ARSD 44:20 to collect and process mandatory reports of communicable diseases.

HOW TO REPORT:
SECURE WEBSITE: http://sd.gov/diseasereport
TELEPHONE: 1-800-592-1861 or 605-773-3737

MAIL OR COURIER:
Infectious Disease Surveillance, Department of Health
615 East 4th Street, Pierre, SD 57501

Positive Connections

The Disease Intervention Specialists (DIS) assist to provide linkage to care services for HIV/AIDS patients who have fallen out of care. If you have a patient for whom you would like to discuss reengagement in care, please contact the Positive Connections Coordinator via email at Ana.Nemec@state.sd.us.

Surveillance Questions?

Questions regarding the surveillance report may be directed to our HIV Prevention and Surveillance Coordinator at 605-367-7202 or Sarah.Zaiser@state.sd.us.

Department of Health Confidential HIV Testing Centers - *Call Toll Free 1-800-592-1861*

RAPID CITY
221 MALL DR., SUITE 102, Rapid City, SD 57701
605-394-2289 & 1-866-474-8221

SIOUX FALLS
4101 W. 38th St., Sioux Falls, SD 57106
605-367-5363 & 1-866-315-9214

ABERDEEN
402 S. Main St.
Aberdeen, SD 57401
605-626-2373
1-866-805-1007

PIERRE
740 E. Sioux Ave., Suite 107
Pierre, SD 57501
605-773-5348
1-866-229-4927

WATERTOWN
2001 SW 9th Ave., Suite 500
Watertown, SD 57201
605-882-5096
1-866-817-4090

MITCHELL
1420 North Main St
Mitchell SD 57301
605-995-8051

MOBRIDGE
210 E Grand Crossing, Ste A
Mobridge, SD 57601
605-951-9165

SOURCES:

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SOUTH DAKOTA DEPARTMENT OF HEALTH

2023 HIV/AIDS Surveillance Report
TECHNICAL NOTES

Page 1.

New diagnosis of HIV reflected in the figure "Persons newly diagnosed with HIV or AIDS in South Dakota, cases by gender, 2013-2022". New diagnosis of HIV is based on incident (newly reported) cases of HIV/AIDS diagnosed in South Dakota during 2013-2022 by diagnosis year. People moving to South Dakota already diagnosed with HIV/AIDS are excluded if they were previously reported in another state. The figure describes confirmed cases of HIV/AIDS that have been completed and pending completion. The figure captures distribution of cases by gender assigned at birth.

Distribution of incident cases by county. "Persons diagnosed with HIV in South Dakota, Incidence rate, by county of residence at diagnosis, 1985-2022". The figure describes incident HIV cases diagnosed in South Dakota in 1985-2022 by county of residence at time of diagnosis. The rates are calculated per 10,000 population using 2021 US census estimates for South Dakota counties. The map is based on 16% percentile: Each shade of a blue color represents counties with 16% of cases.

Prevalence: The prevalent cases include confirmed HIV cases, with investigation status of completed, pending or out of state, who have been known to SDDOH as being alive as of December 31, 2022, and known to reside in South Dakota. Prevalent case count excludes cases that have been reported as dead as of December 31, 2022, by either state's vital records or national death index (NDI). Likewise, a person's county or city of residence is assumed to be the most recently reported value unless the SDDOH is otherwise notified. Residence information is updated through standard case reporting, routine lab reporting, and/or correspondence with other state health departments. People diagnosed with HIV infection while imprisoned in a state correctional facility are included in the data presented unless otherwise noted (people who are federally and privately incarcerated are excluded).

The heatmap titled "U=U: Undetectable = Untransmittable" is based on prevalent HIV/AIDS cases who are alive and live in South Dakota, regardless of state/country of diagnosis. The heatmap indicates counties with the highest prevalence of non-virally suppressed cases (in red color). Calculations are based on three-step procedure: First, we calculate percentage of virally unsuppressed cases among all prevalent HIV cases by county. Second, we calculate prevalence of all HIV cases by county (regardless of viral suppression status). In a final step we multiply percentage of virally suppressed cases for each county to the overall prevalence of HIV by county. This way we generate non-virally suppressed rate weight by HIV prevalence rate which is actually presented on the heatmap.

Page 2.

Data displayed on race, ethnicity, age, and gender, reflect the prevalent HIV case counts. Race categories presented are self-reported and are further classified based on a hierarchy prioritizing racial minorities (e.g. American Indian/Alaska Native and Black/African American) when individuals are multi-racial. Age groups are based on age as of December 31, 2022, and is calculated using date of birth of each case. Gender is reported based on a current gender of a case.

Prevalence per 10,000 population for each racial category is calculated using 2021 US census data for South Dakota with single race (not a combination of races) as a denominator.

Statement about racial and ethnic disparities describes racial and ethnic minorities (e.g. American Indian/Alaska Native, Black/African American or Hispanic) and is based on percentage of cases classified as either racial category listed in surveillance data and is compared to percentage of population estimates provided by US Census bureau for 2021 as a single race.

Percentage of AIDS diagnoses among HIV-diagnosed individuals is based on prevalent case count (confirmed, completed, pending, out of state cases living in South Dakota) known to be alive as of December 31, 2022 and being diagnosed with HIV and/or AIDS on or before December 31, 2022.

Percentage of late testers (cases diagnosed with AIDS with ≤1 year) is based on incident HIV and AIDS cases (confirmed and completed cases with South Dakota as a

state of diagnosis). Cases of AIDS have been diagnosed with AIDS-defining conditions during 2013-2022. Percentage of late testers have been calculated using AIDS cases that progressed into AIDS within ≤1 year of HIV diagnosis with having HIV and AIDS combined as a denominator. The year of diagnosis is the year of HIV or AIDS diagnosis of cases.

Risk-factors of cases are based on incident cases of HIV diagnosed with HIV during 2013-2022 in South Dakota. Year of diagnosis is the year reported on the figure. Risk-factors do not follow hierarchy commonly used in risk-factor classification. If a case reports multiple risk-factors, overall percentage for each risk-factor is calculated separately for each risk-factor with total number of incident cases as a denominator.

Page 3.

HIV care continuum is based on specific report that uses prevalent HIV cases residing in South Dakota as of Dec 31, 2022 that have been diagnosed with HIV, received care, retained in care, prescribed ART, or are virally suppressed as of Dec 31, 2022. Percentages are calculated using a common denominator of all prevalent cases.

According to CDC, STDs are associated with increased risk for HIV sexual acquisition and transmission1. **The table entitled "Coinfection with chlamydia, gonorrhea, hepatitis C, syphilis & Tuberculosis (TB)"** reflects prevalent HIV cases co-infected with chlamydia, gonorrhea, hepatitis C, syphilis & tuberculosis by year, age, and sex. Years of co-infection are based on event dates of chlamydia, gonorrhea, hepatitis C, syphilis, and tuberculosis (TB) rather than diagnosis of HIV. Coinfected cases with event dates prior to HIV diagnosis date are excluded from analysis. Only cases being diagnosed with chlamydia, gonorrhea, hepatitis C, syphilis & tuberculosis after being diagnosed with HIV are included. Coinfections are calculated using completed case counts of confirmed and probable cases of chlamydia, gonorrhea, hepatitis C (acute, chronic, perinatal), syphilis (all stages) and tuberculosis (active TB cases diagnosed in SD). Age and gender of cases presented in the table reflect age and gender at the time of chlamydia, gonorrhea, hepatitis C, syphilis, or tuberculosis event dates.

STI Statistics for 2022 are based on provisional data and are subject to change. The case counts provided on STI statistics are based on completed cases with confirmed and probable disease classification status among South Dakota residents.

Supplementary Information

Routine Interstate Duplicate Review (RIDR).
The South Dakota Department of Health continues to participate in RIDR. RIDR is a CDC project aimed at eliminating duplicate reports of HIV and AIDS cases among states. Each case of HIV and AIDS is assigned to the state (or states when the diagnosis of HIV and AIDS occurs in two different states) where a person was first diagnosed. RIDR is now an ongoing activity that all states are expected to undertake. CDC will release a RIDR report every six months which may affect the ownership of South Dakota cases. Ongoing participation in this initiative will allow for proper attribution of incident and prevalent cases in South Dakota.

References

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